

A Holistic Approach to Closure Part A: Deadline to Initiate Closure

SIGNED JULY 29, 2020

PENDING PUBLICATION

Key Messages

Two main purposes:

- Address portions of the *USWAG* and the *Waterkeeper* court decisions
- Enhance the public's access to information

This rule finalizes:

1. Definition of Lined Unit (removing a “clay-lined” from the definition)
2. New Initiation of Closure and Cease Receipt of Waste Deadline of April 11, 2021 and implementing the vacatur in §257.101(a)
3. New Alternative Closure Provisions for surface impoundments:
 - Site Specific Alternative to initiation of closure deadline due to lack of disposal capacity (§ 257.103(f)(1))
 - Site Specific Alternative to initiation of closure deadline due to Permanent Cessation of Coal-Fired Boiler(s) by a Date Certain (§ 257.103(f)(2))
4. New executive summary requirement for the Groundwater Monitoring and Corrective Action Annual Reports
5. Revisions to the publicly accessible CCR Internet site requirements

New Definitions

Eligible unlined CCR surface impoundment- an existing CCR surface impoundment that meets all of the following conditions:

- (1) The owner or operator has documented that the CCR unit is in compliance with the location restrictions specified under §§ 257.60 through 257.64;
- (2) The owner or operator has documented that the CCR unit is in compliance with the periodic safety factor assessment requirements under § 257.73(e) and (f); and
- (3) No constituent listed in Appendix IV to part 257 has been detected at a statistically significant level exceeding a groundwater protection standard defined under § 257.95(h).

Technically feasible- possible to do in a way that would likely be successful.

Technically infeasible- not possible to do in a way that would likely be successful.

Clay-Lined Units and Closure of Units

Final rule removes the provision that treated “clay-lined” impoundments differently than unlined impoundments

- Consistent with the *USWAG* decision, a clay-lined impoundment is now considered an unlined unit.
- Rule revises § 257.71(a) and (c) (Liner design criteria for existing impoundments).

Final rule requires closure of unlined impoundments, irrespective of whether groundwater monitoring of an unlined impoundment shows an exceedance of a groundwater protection standard

- Rule revises § 257.101(a) to reflect *USWAG* decision.

Reconsideration of Cease Receipt of Waste Deadline

Final rule revises the deadline from October 31, 2020 to April 11, 2021

- New deadline based on requiring facilities to cease placement of all wastes (both CCR and non-CCR) into impoundments as soon as technically feasible
- New date replaces the dates in §257.101(a)(1) and §257.101(b)(1)(i)

EPA supplemented the data set used in the proposed rule with additional project timeframes submitted during the comment period

EPA examined each submission and either accepted, rejected or reduced portions of the project timeframes. Final rule analysis:

- Accepted timeframes for completed projects that included all phases of construction
- Accepted information when commenter provided a detailed narrative description and project schedule
 - In some cases EPA reduced some portions of the estimated time where the time substantially exceeded the time presented in other submissions or were based on factors unique to that site that are unlikely to be relevant to other facilities nationwide
- Did not accept provided information when a project timeline did not include all phases of the project, or when timeline was presented with insufficient detail

Reconsideration of Cease Receipt of Waste Deadline

| Alternative Capacity Technology | Data Used in Final Rule Analysis (Months) | Average (Months) |
|---------------------------------------|--|------------------|
| Conversion to dry handling | 33.5, 34 | 33.8 |
| Non-CCR wastestream basin | 18, 29 | 23.5 |
| Wastewater treatment facility | 18.5, 26 | 22.3 |
| New CCR surface impoundment | 28, 34 | 31.0 |
| Retrofit of a CCR surface impoundment | 12, 31.5, 46 | 29.8 |
| Multiple technology system | 36, 36, 36, 36, 36, 36, 36, 36, 36, 37.5, 40, 52, 55 | 39.1 |
| Average | | 29.9 |

Reconsideration of Cease Receipt of Waste Deadline

Technical feasibility analysis based on 3-step approach:

- Evaluated six technology approaches for alternative capacity and the time to implement each approach
- Calculated the average implementation time of the six technology approaches
- New deadline determined by adding the average implementation time to Oct 15, 2018, which is the date of issuance of the court's mandate for *USWAG*

EPA calculated the average implementation time of the six technology approaches to be 29.9 months

- Oct 15, 2018 + 29.9 months = Apr 11, 2021

New Alternative Closure Provisions

Rule adds provisions to the existing alternative closure provisions that allows facilities to obtain additional time beyond April 11, 2021 to use a surface impoundment otherwise required to close

To streamline the closure process for surface impoundments EPA modified the existing alternative closure provisions (§ 257.103(a) and (b)) to only be applicable to landfills.

New Alternative Closure Provisions for surface impoundments:

1. Site specific alternative to initiation of closure deadline due to lack of disposal capacity (§ 257.103(f)(1))
2. Site specific alternative due to permanent cessation of coal-fired boiler(s) by a date certain. (§ 257.103(f)(2))

Summary of Finalized Deadlines

| Regulatory Citations for CCR Surface Impoundments | Deadline Date |
|---|---|
| New cease receipt of waste deadline for unlined and formerly clay-lined surface impoundments (§257.101(a)(1)) | No later than April 11, 2021 |
| New cease receipt of waste deadline for surface impoundments that failed the minimum depth to aquifer location standard (§257.101(b)(1)(i)) | No later than April 11, 2021 |
| New site-specific alternative to initiate closure due to lack of capacity (§257.103(f)(1)) | <ul style="list-style-type: none">• No later than October 15, 2023• Eligible unlined CCR surface impoundments: no later than October 15, 2024 |
| New site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain (§257.103(f)(2)) | <p>Complete Closure:</p> <ul style="list-style-type: none">• No later than October 17, 2023 for surface impoundments 40 acres or smaller• No later than October 17, 2028 for surface impoundments larger than 40 acres |

Short Term Extension (§ 257.103(e))

EPA decided to not finalize the proposed short-term extension

The provision was intended to account for the short interval between the proposed deadline to cease receipt of waste (August 31, 2020) and the expected promulgation of the final rule (July 2020)

- This timeframe would be too short for a facility to accommodate unforeseen events that impact the construction schedule and still be able to meet the deadline
- This is no longer the case due to the new deadline being April 11, 2021
- Facilities now have several months between publication of the rule and the demonstration deadline to be able to accommodate unforeseen events

EPA has reserved § 257.103(e) to avoid confusion in the final rule

Alternative Due to Lack of Capacity (§ 257.103(f)(1))

Allows continued use of a CCR surface impoundment while the facility completes development of alternative capacity

To obtain approval under this provision the owner or operator must submit documentation that demonstrate the following:

1. No alternative disposal capacity is available on or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section;
2. Either:
 - A. For units closing pursuant to § 257.101(a) and (b)(1)(i), CCR and/or non-CCR wastestreams must continue to be managed in that CCR surface impoundment because it was technically infeasible to complete the measures necessary to obtain alternative disposal capacity either on or off-site of the facility by April 11, 2021.
 - B. For units closing pursuant to § 257.101(b)(1)(ii), CCR must continue to be managed in that CCR surface impoundment because it was technically infeasible to complete the measures necessary to obtain alternative disposal capacity either on or off-site of the facility by April 11, 2021.
3. The facility is in compliance with all of the requirements of this subpart.
4. The facility must complete development of alternative capacity and cease receipt of waste no later than:
 - October 15, 2024 for eligible unlined CCR surface impoundments
 - October 15, 2023 for all other CCR surface impoundments

§ 257.103(f)(1) Demonstration

The owner/operator must submit a demonstration in accordance with § 257.103(f)(1)(iv) that they meet the criteria by submitting the following:

- A. Workplan (§ 257.103(f)(1)(iv)(A))
- B. Documentation showing that the unit is in compliance with the CCR regulations (§ 257.103(f)(1)(iv)(B))

The demonstration is required to be submitted to EPA no later than November 30, 2020

The owner/operator must submit a demonstration to EPA for approval for a specific amount of time to be able to continue to use their surface impoundment while developing alternative capacity for CCR and/or non-CCR wastestreams

The owner/operator must complete development of alternative capacity and cease receipt of waste no later than:

- October 15, 2024 for eligible unlined CCR surface impoundments
- October 15, 2023 for all other CCR surface impoundments

Workplan Requirements

1. A written narrative discussing the options considered both on and off-site to obtain alternative capacity for each CCR and/or non-CCR wastestreams, the technical infeasibility of obtaining alternative capacity prior to April 11, 2021, and the option selected and justification for the alternative capacity selected. The narrative must also include all of the following:
 - An in-depth analysis of the site and any site-specific conditions that led to the decision to select the alternative capacity being developed
 - An analysis of the adverse impact to plant operations if the CCR surface impoundment in question were to no longer be available for use
 - A detailed explanation and justification for the amount of time being requested and how it is the fastest technically feasible time to complete the development of the alternative capacity

Workplan Requirements Cont

2. A detailed schedule of the fastest technically feasible time to complete the measures necessary for alternative capacity to be available including a visual timeline representation. The visual timeline must clearly show all of the following:
- How each phase and the steps within that phase interact with or are dependent on each other and the other phases
 - All of the steps and phases that can be completed concurrently
 - The total time needed to obtain the alternative capacity and how long each phase and step within each phase will take
 - At a minimum, the following phases: engineering and design, contractor selection, equipment fabrication and delivery, construction, and start up and implementation.

Workplan Requirements Cont

3. A narrative discussion of the schedule and visual timeline representation, which must discuss all of the following:
- Why the length of time for each phase and step is needed and a discussion of the tasks that occur during the specific step
 - Why each phase and step shown on the chart must happen in the order it is occurring
 - The tasks that occur during each of the steps within the phase
 - Anticipated worker schedules

Workplan Requirements Cont

4. A narrative discussion of the progress the owner or operator has made to obtain alternative capacity for the CCR and/or non-CCR wastestreams.
- The narrative must discuss all the steps taken, starting from when the owner or operator initiated the design phase up to the steps occurring when the demonstration is being compiled.
 - It must discuss where the facility currently is on the timeline and the efforts that are currently being undertaken to develop alternative capacity.

Compliance Documentation

A facility must submit the following information for the compliance part of the demonstration (§ 257.103(f)(1)(iv)(B)):

1. A certification signed by the owner or operator that the facility is in compliance with all of the requirements of this subpart
2. Visual representation of hydrogeologic information at and around the CCR unit(s) that supports the design, construction and installation of the groundwater monitoring system. This includes all of the following:
 - Map(s) of groundwater monitoring well locations in relation to the CCR unit(s)
 - Well construction diagrams and drilling logs for all groundwater monitoring wells
 - Maps that characterize the direction of groundwater flow accounting for seasonal variations
3. Constituent concentrations, summarized in table form, at each groundwater monitoring well monitored during each sampling event
4. A description of site hydrogeology including stratigraphic cross-sections

Compliance Documentation Cont

5. Any corrective measures assessment conducted required at § 257.96
6. Any progress reports on corrective action remedy selection and design and the report of final remedy selection required at § 257.97(a)
7. The most recent structural stability assessment required at § 257.73(d)
8. The most recent safety factor assessment required at § 257.73(e)

Alternative for Facilities Ceasing Generation of Coal Fired Boiler(s) by a Date Certain (§ 257.103(f)(2))

If a facility is ceasing generation of coal fired boiler(s) by a date certain then the facility must complete closure by Oct 17, 2023 for surface impoundments 40 acres and smaller and by Oct 17, 2028 for surface impoundments larger than 40 acres

The demonstration is required to be submitted to EPA no later than November 30, 2020

To obtain approval under this provision the owner or operator must submit documentation that demonstrate the following :

- No alternative disposal capacity available on-site or off-site
- Potential risks to human health and the environment from the continued operation of the CCR surface impoundment have been adequately mitigated
- The facility is in compliance with all other requirements of the CCR rule, including corrective action
- The facility will be able to complete closure by October 2023 for impoundments less than 40 acres or October 2028 for impoundments 40 acres or more.

§ 257.103(f)(2) Demonstration Requirements

The demonstration must include:

1. A narrative that explains the options considered to obtain alternative capacity for CCR and/or non-CCR wastestreams both on and off-site
2. A risk mitigation plan describing the measures that will be taken to expedite any required corrective action, and that contains all of the following elements:
 - A discussion of any physical or chemical measures a facility can take to limit any future releases to groundwater during operation
 - A discussion of the surface impoundment's groundwater monitoring data and any found exceedances, the delineation of the plume (if necessary based on the groundwater monitoring data), identification of any nearby receptors that might be exposed to current or future groundwater contamination, and how such exposures could be promptly mitigated
 - A plan to expedite and maintain the containment of any contaminant plume that is either present or identified during continued operation of the unit.
3. Documentation showing that the unit is in compliance with the CCR regulations (same as (f)(1))
4. Documentation showing the closure deadline will be met by submitting a closure plan and a narrative that specifies and justifies the date by which they intend to cease receipt of waste in the unit

Approval Process for Alternative Deadlines (§ 257.103(f)(3))

Final rule approach largely adopts the proposed procedures

Demonstrations must be submitted to EPA no later than Nov 30, 2020

- Standard postal and overnight delivery addresses can be found at:
<https://www.epa.gov/aboutepa/mailing-addresses-and-phone-numbers>
- ORCR also requests that submittals be emailed to Huggins.Richard@epa.gov and Hillyer.Kirsten@epa.gov

EPA review and decision procedures:

- Demonstrations are reviewed for completeness
 - EPA may request additional, clarifying information to complete its review
 - Submission of a complete demonstration tolls the deadline to cease receipt of waste
 - Submissions determined to be incomplete will be rejected without further process
- After review, EPA will either issue a proposed decision to grant or to deny the request
 - Public will have between 15-30 days to comment on the proposed decision
 - EPA will post all decisions on its website and in the relevant docket
 - Decision will specify the deadline to cease waste receipt and initiate closure of the unit

Transferring Between Alternatives

The owner/operator that is currently using § 257.103(a) or (b) for a CCR surface impoundment must submit a demonstration for either § 257.103(f)(1) or (f)(2) no later than November 30, 2020 if the facility wants to use an extension past April 11, 2021.

- If a demonstration is not submitted, the facility must cease receipt of waste no later than April 11, 2021

The owner/operator may switch from § 257.103(f)(1) to (f)(2) if the facility can meet the closure deadlines of (f)(2) and the other eligibility criteria

- The facility is required to notify EPA and submit a new demonstration under the (f)(2) requirements

The owner/operator may switch from § 257.103(f)(2) to (f)(1) if the facility can meet the initiation of closure deadlines of (f)(1) and the other eligibility criteria

- The facility is required to notify EPA and submit a new demonstration under the (f)(1) requirements

Progress Reports

Facilities with an approved site-specific alternative deadline due to lack of capacity (§ 257.103(f)(1)) are required to complete semi-annual progress reports. (§ 257.103(f)(1)(x))

- The reports are to document the progress on obtaining alternate disposal capacity
- The reports require a discussion if the facility is on track for obtaining capacity to meet the alternative deadline

Facilities with an approved site-specific alternative for permanent cessation of a coal fired boiler(s) (§ 257.103(f)(2)) are required to complete annual progress reports. (§ 257.103(f)(2)(x))

- The reports are to document the progress towards completing closure of the unit

Revisions from the August 2019 Proposal

Executive Summary to the Groundwater Monitoring and Corrective Action Annual Report

The final rule revised § 257.90(e)(6) to require the annual report to include a section at the beginning of the annual report that provides an overview of the current status of the program.

Minimum requirements include:

- Identifying whether the CCR unit is operating under the detection monitoring or assessment monitoring program
- Identifying the constituents in question when exceedances are found
- Providing key dates when certain actions are taken, for example:
 - When the assessment monitoring program was initiated
 - When the assessment of corrective measure was initiated
 - When the public meeting was held under the assessment of corrective measures provisions
 - When the assessment of corrective measures was completed
 - When a remedy was selected
- Identifying whether remedial activities were initiated or are ongoing during the reporting period

Revisions to the Publicly Accessible CCR Internet Site Requirements

CCR regulations require facilities to establish and maintain a publicly accessible Internet site

- Website makes relevant information required by the regulations available to the public in a manner that will encourage and assist public participation in the implementation of the regulations

EPA finalized revisions at § 257.107 to better ensure websites are readily accessible

- To address situations such as website registration to access the information, websites that do not allow for documents to be downloaded or printed

The final rule:

- Requires website information be immediately available without requiring any prerequisite or approval process (e.g., registration, submitting requests to facility)
- Requires facilities to notify EPA if changes are made to the web address
- Requires facilities to provide a “contact us” mechanism on its website so the public can alert the facility when there are CCR website issues (e.g., unavailable files)

Questions?

Appendix Slides

Litigation

2015 Rule Litigation

USWAG v. EPA

- The court decision issued August 21, 2018 and mandate issued on October 15, 2018
- Remanded beneficial use issues to EPA (that is, the issue of the threshold for an environmental demonstration [the “12,400 tons”]), and the definition of a “pile”
- Court overturned 3 provisions:
 - That “clay-lined” CCR surface impoundments could operate indefinitely
 - That only leaking unlined surface impoundments were required to close
 - That inactive surface impoundments at closed utilities were not subject to the CCR rule

Litigation

July 2018 Rule Litigation

Waterkeeper Alliance v. EPA

- Waterkeeper challenged July 2018 final rule
- With the challenge they requested an expedited review of October 2020 deadline for cease receipt of waste
- EPA requested for a remand without vacatur of the October 2020 deadline and promised best efforts to complete the rule making in 9 months
- On March 13, 2019 the court granted EPA's request for remand without vacatur
- Challenges to other portions of July 2018 rule to be briefed/schedule not yet set.

July 2018 Final Rule Topics

Established a new deadline, October 2020, for cease placement of waste for unlined units with a GWPS exceedance and those units that failed aquifer location restriction

Established alternative risk-based groundwater protection standards for constituents where no MCL exists

Suspension of groundwater monitoring requirements if a no migration demonstration can be made

Allow Directors of states to issue certifications in lieu of the current requirement to have PEs issue certifications